

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/112448 A3

(51) International Patent Classification?: **G09G 5/00**

(21) International Application Number:
PCT/IB2004/050880

(22) International Filing Date: 10 June 2004 (10.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/320,276 13 June 2003 (13.06.2003) US

(71) Applicant (for all designated States except US):
SEMTECH CORPORATION [US/US]; 200 Flynn
Road, Camarillo, CA 93012-8790 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MARTEN**, Victor
[US/US]; Semtech Corporation, 200 Flynn Road, Camar-
illo, CA 93012-8790 (US).

(74) Agent: **OPPEDAHL**, Carl; Oppedahl & Larson LLP, P O
Box 5068, Dillon, CO 80435-5068 (US).

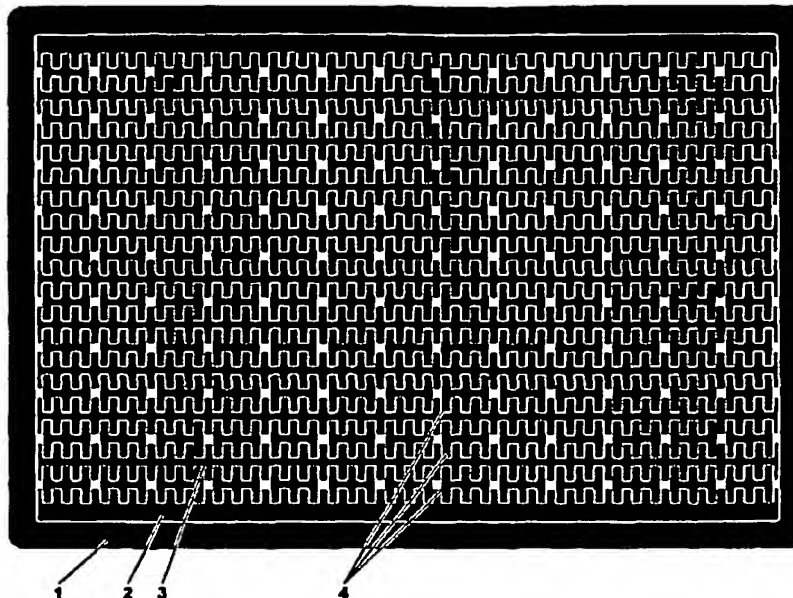
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: **SENSOR FOR CAPACITIVE TOUCH PAD POINTING DEVICE**



Artwork for the First (Top) Copper Layer

(57) Abstract: The topology and the shape of sensing electrodes (4, 31) on the Capacity Touch Pad Sensor that allow sensing of small targets are disclosed. Sensor construction utilizes common PCB manufacture technique.